SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Why Tipu Sultan is called as the original rocket man of India?

17. Explain the creation of LED's and its usages.

18. What is Robotics? Explain the use of Artificial Intelligence.

19. Narrate the invention of Gravity.

20. Explain the 5G technology and its usages.

NOVEMBER/DECEMBER 2024

FPE10C/CPE10C — PROFESSIONAL ENGLISH FOR PHYSICAL SCIENCES

Time : Three hours Maximum : 75 marks

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SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Find the statement is whether True / False:
   (a) Vaseline is a moisturising agent.
   (b) Vaseline is a non-medicinal product.

2. Petroleum jelly is easy to find and _____ (ineffective/inexpensive). It is chemically Similar to skin _____ (protein/vitamin).

3. What is Role Play?

4. What do you mean by reading between the lines?

5. What is Acoustic?

6. Write a sentence using the listed words:
   (a) Voyage
   (b) Mystery

7. How did Archimedes calculate the value of pi?

8. Who is an Egyptologist?

9. What is navigation?

10. Define: Big bang theory.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Match the following:

(i)	Crystal Dynamics	–	a frequency above the human ear's audibility limit
(ii)	Hypersonic	–	the vibrational movement of atoms in the solid state
(iii)	Ultrasonic	–	than 5Mach
(iv)	Optics	–	Speed of more concerned with the properties of sound.
(v)	Acoustics	–	studies the behaviours and properties of light

Or

(b) Why the sea is blue? Explain using the words listed – Raman Effect, Scattering of light, Diffraction.

12. (a) Write about the effects of mobile phones.

Or

(b) Write the steps involved in writing a definition.

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13. (a) Explain the physics in soap bubbles.

Or

(b) Explain your understanding about the three laws of robotics.

14. (a) Write about Kalpana Chawla's expedition to space.

Or

(b) Why do we have to shift to biomass and biofuel?

15. (a) Explain the Pythagoras theorem and its usages.

Or

(b) Explain the theory of Bigbang.